

David Rumsey

WELTE'S PHILHARMONIE FOR TURIN 1911 – THE EVIDENCE OF THE ROLLS

The International Exhibition in Turin, Italy, held between April and November 1911, was a major event for the music industry. Leading instrument manufacturers were well represented. Lamentably, no evidence to identify the instruments and rolls that the Welte firm exhibited there is currently known.¹ As for their organs, smaller models would certainly have been more easily transportable, but they would not have shown off the firm's product to best advantage over the competition.² Naturally the “Philharmonie” models V–VI would have created the major impact needed to impress the judges and the purchasing public. But there is no specific mention of any model in the chronicles. The relevant master rolls, on the other hand, are very interesting witnesses. Some 1,250 of them are now in the trust of the Swiss Federal Office of Culture, held at the Museum der Musikautomaten, Seewen.

Since the judges awarded Welte a “Diploma di Gran Premio”, something must have stood out. Was the much-touted “artist-recorded” sufficient to sway them? It is less likely to have swayed any White Star Line shipping company representatives: popular operatic and symphonic transcriptions would have been of more interest to them in the entertainment stakes for their first-class passengers. This repertoire was already available in the late 19th century on orchestrion rolls; many were upgraded to “Philharmonie” standards in the 1910–1920 era.

If artist-recordings did convince the jury, then we need to ask: which rolls of live performances could Welte have taken to Turin? At least twice during the month before Turin opened the firm placed prominent “Philharmonie” advertisements. Artist-recorded rolls (“Künstlerrollen”) were expressly mentioned.³ It is unthinkable that they would make so much fuss if they had nothing at all to demonstrate.

Were the judges impressed because a playing console (keyboard, stops and pedals) was attached? This was also a significant advance; competitors were well behind. Yet, if Welte's exhibit had a keyboard, then famous organists like Marco Enrico Bossi and his son, Renzo, might be chronicled as having played it. Other noted organists passed through Turin at this time, Gabriel Pierné for example. Surely Welte's publicity machine could not have let chances like that go by? Yet we hear nothing. Absence of a keyboard might suggest a smaller model. The organ in the advertisement had no keyboard, although it was not specifically linked to Turin and the image provided looked more like a stock model I–II.⁴

Reports of attendance at the Exhibition vary. Some express disappointment, others claim up to 150,000 visitors a day.⁵ The builders of the Titanic, launched just after Turin opened, had wanted an organ – the bigger the better – but Welte were too far behind in developing their “Philharmonie” for that to have been an option.⁶ An Aeolian organ was originally planned for the Britannic, but apparently after the Turin Exhibition this was changed to a large Welte “Philharmonie”.⁷ The presence of a Model V–VI at this exhibition could explain much



Fig. 1 – Welte's advertisement of March 1911

of what was subsequently planned for the high seas. “Philharmonie” installations began in 1912.⁸ By one means or another Welte stole the march on their competition to earn that “Diploma di Gran Premio”. It could have been instrument size, impressive roll demonstrations, provision of a console and/or artist recordings. With the latter, however, we have some problems: availability seems to have been very limited and the technology not fully ready even if the advertising material was touting it.

Dating “Philharmonie” Rolls

The sequence of “Philharmonie” roll numbers is one of the few clues we have to a chronology for them. In conjunction with these numbers, the Master Rolls at Seewen sometimes have important details written on their lead-ins including the dates of earliest editing. Known recording session dates sometimes provide helpful locating points. Bossi’s rolls, for example, start at W1000 and his recording sessions commenced on July 18th 1912.⁹

Taken together, all of Seewen’s rolls, the relevant Welte catalogues, rolls known to exist in the USA, Meggen (CH), the Barnabé Theatre in Servion (CH), Rüdeshheim (D), the collections of Hans Schmitz (D) and Nelson Barden (USA) and information in the Deutsches Musikautomaten-Museum (Bruchsal) Exhibition Catalogue of 2012,¹⁰ allow us to structure a basic numerical inventory.¹¹ From that we may deduce a tentative chronology with relatively few anomalies until roll W2066 when a block of

cinema organ rolls is found. These, Welte’s remakes of earlier rolls around W4000 and some other numbering “incidents” then disturb this methodology.

Welte’s “Turin” rolls

Based on this evidence, the rolls known from immediately around the Turin event are shown in the following table – red indicates an Italian connection, green signifies earlier orchestrion rolls converted to “Philharmonie” formats, blue are artist-recorded organ rolls, and those marked with an asterisk are conversions from earlier piano roll recordings.¹²

On examining this list, artist-recorded organ rolls of any consequence seem to have been rarities until after the Turin exhibition commenced in April 1911.¹³ At that stage conversions from orchestrion rolls formed the bulk of usable “Philharmonie” playback material, supplemented by converted piano-rolls. This was gradually overtaken by organ artist-recordings from around 1912. Roll numbers up to W482 may broadly be assumed to date before the Turin event began, and from W491 onwards, after. At this time a marked increase in Italian-connected repertoire seems significant and Mozart’s music comes as no surprise in this international scene. But W482 is clearly dated as “finished” on March 9th 1911.¹⁴

Apart from being so limited in numbers, the artist-recorded repertoire available for the start of the Turin event was mostly decidedly inappropriate:¹⁵ American popular songs (Stephen Foster)

Rolls made before 9th March 1911:

| | | | |
|-----|------------|-------------|--|
| 429 | Mozart | Orchestrion | Fantasie fuer eine Orgelwalze |
| 442 | Verdi | Orchestrion | Aida, Act IV, Part 3 |
| 447 | Wagner | Orchestrion | Rienzi Overture (set in Rome) |
| 449 | Planquette | Orchestrion | Gocken Von Corneville |
| 450 | Wagner | Orchestrion | Lohengrin, Introduction And Bridal Chorus |
| 451 | Ponchielli | Orchestrion | Gioconda, II. Potpourri |
| 457 | Wagner | Orchestrion | Lohengrin, Selection IV |
| 466 | Wagner | Orchestrion | Tannhauser, March |
| 467 | Pratesi | Orchestrion | Nocturne |
| 469 | Wagner | Orchestrion | Parsifal, Vorspiel |
| 471 | Gottschalk | Orchestrion | The Dying Poet / The Last Hope – Various Songs |
| 472 | Wagner | Orchestrion | Lohengrin, Vorspiel I |
| 474 | Rosa | Philipp | Canzonetta: Nah und fern |
| 481 | Rossini | Orchestrion | Wilhelm Tell, Ouverture |
| 482 | Rossini | Orchestrion | Wilhelm Tell, Trio, Vox hum. |

W 482 is dated as “finished” 9th March 1911 – the Turin exhibition took place between April 29th and November 30th 1911

Rolls made approx. mid-1911 to mid-1912:

| | | | |
|-----|-------------------|--------------------|--|
| 491 | Rubinstein | * Lhévinne | Kamennoi ostrow, Op. 10, No. 22 |
| 500 | Wieniawski | Orchestrion | Valse De Concert Op. 3 |
| 502 | Schubert | Orchestrion | Am Meer, Lied |
| 504 | Schubert | Orchestrion | Lindenbaum, arr. Fr. Franz |
| 506 | Schubert | Orchestrion | Ständchen "Leise flehen meine Lieder" |
| 507 | Schubert | Orchestrion | Die Allmacht |
| 509 | Schubert | Philipp | Litanei |
| 510 | Schubert | Philipp | Thekla, eine Geisterstimme |
| 511 | Schubert | Philipp | Wiegenlied |
| 512 | Schubert | Philipp | Meeresstille |
| 513 | Schubert | Philipp | Pax Vobiscum |
| 514 | Schubert-Fischhof | * Grünfeld | Ballet aus Rosamunde, arr. Grünfeld |
| 515 | Schubert-Liszt | * Burmeister | Ave Maria |
| 516 | Schumann | * Grünfeld | Träumerei aus Kinderszenen, Op. 15 No. 7 |
| 518 | Schumann | *? Schoor | Schlummerlied |
| 523 | Sgambati | * Lhévinne | Vecchio Minuetto, Op. 18 für Orgel übertr. |
| 526 | Saint-Saens | Orchestrion | Samson And Delila / Cantabile Du Grand Duo |

or Protestant Chorale settings were hardly going to be a major selling-point in Papal Italy during 1911. Of course, development of recording technology would not have stopped in Freiburg during April-November 1911, so it is possible that more artist recordings were made available during the Exhibition.

If any artist performances were initially recorded onto 75- 100- or 120-hole rolls, then we might have a case for arguing that smaller Welte models than V–VI were all that were present in Turin.¹⁶ But there is no evidence for this. The "Philharmonie" III–VI used a 150-hole tracker-bar which the above listings represent exclusively. All the artist-recorded masters at Seewen are 150-hole rolls.

It is not merely the hole-count of 150 that is critical here.¹⁷ The tonal resources required by 150-hole "Philharmonie" rolls are only fully realizable on models V–VI. With small models not even the note-compasses extend far enough, needing to start two octaves below middle C and extend from there up for 58 chromatic notes, and no two-manual and pedal works were possible without somewhat destructive faking. With registration, downward-patching to fewer stops was necessary if anything smaller than V–VI was used. The resources required by all master rolls for Models V–VI, whether artist-recorded or orchestrion- or piano-converted, correspond at least to the organ specification given by Binninger for the 1909 recording organ:¹⁸

Freiburg, Welte Premises 1909 (D:) 23/II+P roll-recording organ by Welte & Söhne

Manual I

| | |
|------------------|---|
| Principal | 8 |
| Traversflöte | 8 |
| Viol d'orchestre | 8 |
| Gamba | 8 |
| Vox coelestis | 8 |
| Fagott | 8 |
| Flöte | 4 |
| Harfe | |
| Glocken | |

Manual II

| | |
|-------------|----|
| Viola | 8 |
| Wienerflöte | 8 |
| Aeoline | 8 |
| Bourdon | 8 |
| Horn | 8 |
| Klarinette | 16 |
| Oboe | 8 |
| Posaune | 8 |
| Trompete | 8 |
| Vox humana | 8 |

Pedal

| | |
|---------|----|
| Violon | 16 |
| Subbass | 16 |
| Cello | 8 |
| Posaune | 16 |

It was enlarged c1913, again c1920, and again c1926 and destroyed in a bombing raid at the end of World War II.¹⁹ The Seewen organ includes all of these 1926 stops.²⁰ To properly play back the “Turin” rolls using their full required resources needs a model at least as big as the above specification: V–VI.

W474: a critical moment for Welte

With W474, Franz Philipp recorded what was misattributed then, and mostly still is, to Salvator Rosa—an Italian painter (1615–73). It stands out as the sole artist-recorded roll with definite Italian connections, datable immediately prior to the Turin Exhibition. Described in the catalogues and on the rolls as “Canzonetta: Nah und fern” its Italian identity is “star vicino al bel idol”, a popular love-song. Today it is known not to be by “Rosa”, but found in a collection of 26 mostly unidentified songs copied by him. Charles Burney is said to have discovered the manuscript in the 18th century and wrongly attributed all, poetry and music, to Rosa. Welte perpetuated the myth in their roll catalogues.²¹ Another of these songs similarly-attributed, is entitled: “Canzonetta di Salvator Rosa, Vado ben speso”. Now known to be by Bononcini, it was also set by Liszt for piano.

Both “Rosa” works became very popular from about mid-19th century onwards. So it is no surprise

that Welte’s recording of the “Canzonetta” was made just prior to Turin, for, by 1911, it was an international hit, artist-recorded, with obvious Italian connections. It also placed only basic demands on their still-under-development organ recording system.

W474 is numbered just before another, W482, clearly dated March 1911. W474 is a 150-hole roll with modest registration demands, but, even as things stand, best played on a Model V–VI. There is a second date on the master: “geändert 13.3.1912” (altered 13th March 1912). Significantly, this is only 2 days after a dated edit to W482. It also had Turin connections. Chronology, Italian connections, the fact that W474 is an artist-recorded roll, the merely basic demands it makes on a technology then still under development and the pressing need to produce artist-recorded rolls: this all strongly points to W474 having been prepared for Turin.

The Seewen master is a re-mastering, which could point to an original recording even before 1911.²² The March 1912 corrections are mostly to the swell dynamics. This suggests that the original recording was made before their swell technology was reliably available. The registration demands are for 2nd Manual Harmonieflöte 8’ and Horn 8’ with Manual I Vox Coelestis 8’, Principal 8’, Flute 4’ and 2’. The 2’, scarcely ever present on small models, begins to appear as a component of a full-organ combination only in larger “Philharmonie” models.²³

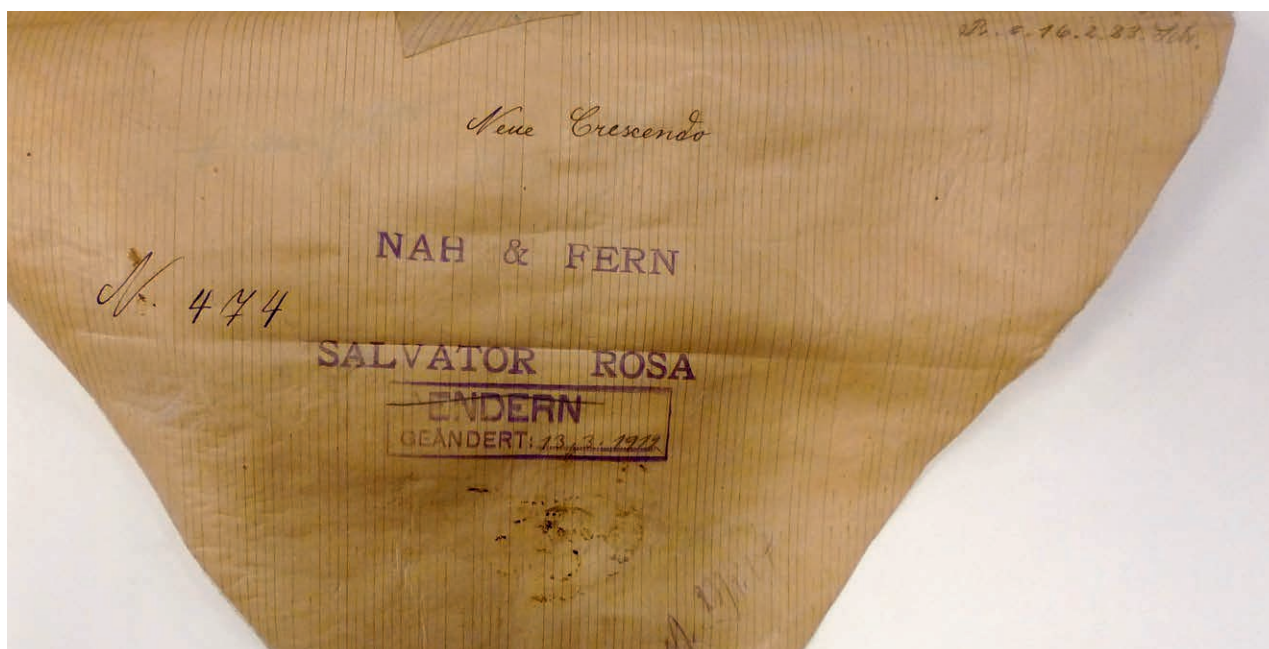


Fig. 2 – Lead-in to Philharmonie master roll, W474, giving title and some editing notes with dates

W474 includes no pedal part. This probably points to their pedal multiplexing system also running behind schedule. Furthermore, there are no stop changes; just one registration is used throughout. Here are more hints that Welte's organ recording technology was not fully ready for Turin. There are also no control signals at the end of this roll and the registration seems a little unbalanced on playback – the soloed right hand somewhat weak for its accompaniment.²⁴ There could be many reasons for this, including different performance paradigms of the era, a variant model instrument, or that this roll was intended as an early “accompaniment roll” using a soft “colla parte” to help the singer.²⁵ A slightly strange switching-in of the Bourdon 16', a pitch not available in the era of Turin on the recording organ, only mentioned in one Hagmann specification of a model II and seemingly not found on more than one still-existing instrument, leaves some unanswered questions about this roll.

In summary, therefore, W474 represents several focal points around the 1911 Turin event:

- * a “Philharmonie” V–VI, 150-hole, artist-recorded roll;
- * a master, requiring resources not exactly matching the normal orchestrion or “Philharmonie” I–II (or even III–IV) but typically available on models V–VI, possibly even from as early as ca. 1909;
- * W482, later in the Welte number-sequencing system, was also made ready in March 1911;
- * its conversion to a “Philharmonie” I–II roll came some 3 years later (around late 1913 or first half of 1914) when many similar conversions from 150-holes “downwards” were being made from artist performance rolls, no doubt to satisfy a market for the more affordable “Philharmonie” I–II models.²⁶

« *Dieses Instrument verdient eine ganz besondere Erwähnung, denn es spielt meisterhaft. Das Arrangement der Notenrollen, z. B. Leonore III von Beethoven, Manon von Massenet, Symphonie Pastorale von Beethoven, ist bewundernswert.* »³⁰

“ *This instrument deserves a very special mention for its masterly playing. The transcription of the player-rolls, e.g. Leonore III by Beethoven, Manon by Massenet, Symphonie Pastorale by Beethoven, is admirable.* ”³⁰

* the re-mastered (i.e. copied from the “perforated master” stage) W474 roll in Seewen's possession shows a clean cut of the manual notes but edited swell perforations. This could indicate that the original had no swell control and that it was added or significantly corrected later. Dominik Hennig has shown elsewhere that the swell system was being modified well into the early years of production.²⁷ The master rolls at Seewen bear evidence that Welte were constantly making adjustments to the rolls through the mid-1920s.

One convincing proof that revision was still needed to their swell systems a year later than W474's 13th March 1912 alterations, lies in Edwin Lemare's 7th March 1913 comment on W1181 – a roll which placed massive demands on Welte's swell operation: “Correct at last!”²⁸ Well before that, W474 would have been an epoch-making artist-recorded organ performance, a milestone achievement.²⁹

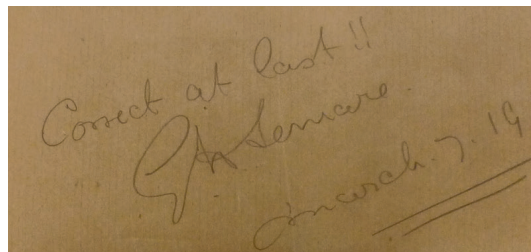


Fig. 3 – Lemare's endorsement, March 7 1913, of his Study in Accents recording

Although piano recordings had already been made and sold successfully, the technological advances in organ recordings demonstrated by this roll could well have been a significant factor that impressed the Turin judges. W474 was a fairly basic organ roll and in no way showed off Welte's “Philharmonie” to full advantage. No wonder, then, that the firm also turned their attention to converting, upgrading and improving selected orchestrion rolls to make the best impression in Turin. And impress they did, as the reviewers' comments amply testify. A correspondent for the Deutschen Instrumentenbau-Zeitung wrote of the Welte “Philharmonie”:

W481 and 482 – taking Rossini to Italy

Italian-oriented repertoire found in the rolls which numerically follow W474 includes long Rossini operatic excerpts, most notably W481 (William Tell Overture), and W482 (William Tell Trio). These were substantial hand-made (“drawn”) rolls, long available as orchestrion rolls, so it is clear that good copies in a less-than 150-hole format pre-existed. The March 1911 version was 150 holes. No comprehensive catalogue of Welte’s orchestrion rolls is available that could give us clues to dates of their creation – about 1890 through 1920 is possible. The final manifestation for many of them was as conversions to “Philharmonie” rolls. But this firm was so experienced in making drawn rolls that, whether or not one was available for conversion to 150, a completely new one was just part of day-to-day operations at Freiburg in 1911. W481 and 482 also exist as orchestrion and “Philharmonie” I–II rolls (for the latter, already also in the 1911 catalogue). These were doubtless at least the companions, probably the origins, of the 150-hole versions of March 1911.

The lead-in to W482 bears two exact dates of critical importance: “fertig 9.3.11 Broeckel” (“finished 9th March 1911 Broeckel”) and “neuen Schluss gemacht 11.3.12” (“new ending made 11th March 1912”). The “finished” date, 9th March 1911, was only days before packing and departure for Turin. It is clear that Welte were plundering both their orchestrion and piano roll resources for suitable “Philharmonie” material.³¹

From the numerous corrections to W482, and the fact that it had to be “adjusted” not long after the Exhibition was over, we gain the impression of

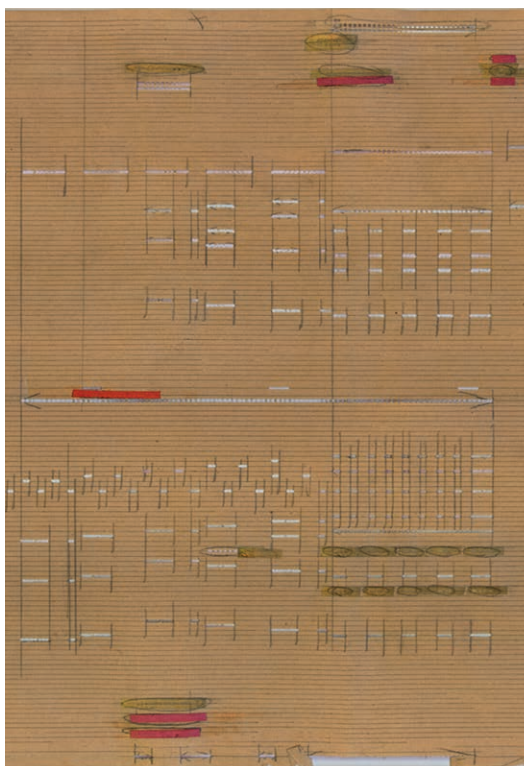


Fig. 4 – A much-edited W482

rather hurried preparations.³² Development of the “Philharmonie” was running late by early 1911 and Turin was about to happen. The corrections of 11.3.1912 presumably came partly in the light of the Turin experience and partly as Welte’s “Philharmonie” technology was achieving full functionality. They were also harbingers of the firm’s technological readiness: Bossi was almost on their doorstep, since he had been engaged to record in mid-July 1912.

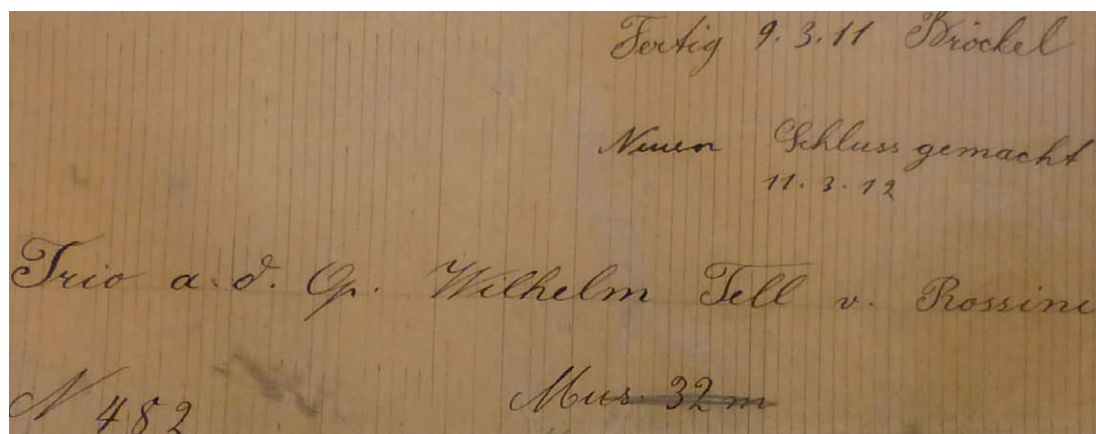


Fig. 5 – Lead-in to W482 with two important dates top right

A reconstructed digital scan of the rather severely-edited master-roll of W482 can be played through Seewen’s “Philharmonie” V – VI. It requires the full resources of the 1913 form of the “Philharmonie” with the exception of Glocken and Harfe.³³

Freiburg, Welte Premises ca. 1913 (D:)
27/II+P Welte-“Philharmonie” recording organ

| | |
|-----------------|-------------------------------|
| Manual | |
| Bordun | 16 |
| Principal | 8 |
| Traversflöte | 8 |
| Gambe | 8 |
| Viol. d’orch. | 8 |
| Vox coelestis | 8 |
| Flöte | 4 |
| Piccolo | 2 |
| Sesquialter | |
| Fagott | 8 |
| Harfe | |
| Glocken | |
| Manual I | |
| Viola | 8 |
| Wienerflöte | 8 |
| Aeoline | 8 |
| Bordun | 8 |
| Dolce | 4 |
| Quinte | 2 ² / ₃ |
| Clarinette | 16 |
| Trompete | 8 |
| Horn | 8 |
| Oboe | 8 |
| (Vox Humana | 8?) |
| Pedal | |
| Violonbass | 16 |
| Subbass | 16 |
| Cello | 8 |
| Gedackt | 8 |
| Posaune | 16 |

Compass: Manual I: C-g³; Manual II: C-a³; Pedals: C-f¹; Accessories: Vox Humana Echo (opens/shuts the Vox Humana’s separate box); Tremolo. Fully enclosed. The Vox Humana stop itself was omitted by Binninger, the source of this specification, clearly a simple oversight.³⁴

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- 1 Nicola Cittadin: “L’esposizione internazionale di Torino nel 1911, Marco Enrico Bossi e la ditta Welte”, in: Museum für Musikautomaten (Hrsg.), *Wie von Geisterhand. Aus Seewen in die Welt – 100 Jahre Welte-Philharmonie-Orgel*, Seewen 2011, p. 188. An alternative reading about Welte’s instruments in Turin is proposed by Brigitte Heck in her article contained in this volume.
 - 2 Welte were quite used to transporting multiple instruments over great distances just to exhibit them – e.g. for the Louisiana Purchase Exhibition in 1904, in the Liberal Arts Building, a whole room was devoted to a “Badische” display that also featured a large forerunner to the “Philharmonie”. See Gerhard Dangel, “Die Firma Welte und die Welte-Philharmonie-Orgeln. Weltweit – eine Bestandsaufnahme”, in: Museum für Musikautomaten (Hrsg.), *Wie von Geisterhand. Aus Seewen in die Welt – 100 Jahre Welte-Philharmonie-Orgel*, Seewen 2011, p. 133.
 - 3 In: Zeitschrift für Instrumentenbau, March 1st 1911, p. 600 and Deutsche Instrumentenbauzeitung March 7th 1911 p. 217.
 - 4 The instrument portrayed appears to be a model I–II, but in view of the unavailability of completed larger models and Welte’s other advertising practices where “expedients” are often obvious, it is the printed word that we might best believe. Case design was fairly optional in the III–VI series, and in any event the larger models had no specific case style, sometimes no cases, and it is entirely possible that the model I–II case design could have been adapted on request or used here “faute de mieux”.
 - 5 Cittadin op.cit.
 - 6 As the deck-plans show, the space available in the first-class stairwell was the same in the three ocean giants, Olympic, Titanic and Britannic, perfect for a model V–VI. The idea was never mooted for Olympic and did not succeed for Titanic. Only Britannic had an organ built for her, the model V–VI now in the Museum der Musikautomaten, Seewen.
 - 7 Dates of the Britannic Specification Book are sometimes estimated as late as “ca. 1914”. However, with the keel already laid by November 1911, the 1914 estimate, if it bears any credibility at all, seems more applicable to linen, crockery or even bar stocks than major integrated furnishings like an organ. Such an instrument needed ordering a year or two in advance. Mark Chirnside, expert on White Star Lines’ great ships of this era, relates that this document, which has so far eluded exact dating, is “probably from c. 1912” (e-mail of 31st March 2013).
 - 8 See Dangel, op.cit. p139ff.
 - 9 Cittadin, op.cit. p192 etc..
 - 10 Deutsches Musikautomaten-Museum (ed.), *Die “Titanic-Orgel”, Eine Legende im Rampenlicht*, Karlsruhe 2012.
 - 11 A complete database of “Philharmonie” rolls is currently under construction. In 2014 this project received a Swiss National Grants Award and is due for completion in about 2017. There are many gaps in contiguity which cannot yet be explained and it is clear that chronology can only be hinted at. Some organists have two groups of numbers allocated but only one recording session is known – which suggests editing of some rolls may have been delayed for a considerable period of time. Covering over 1600 separate roll titles, Welte-allocated numbers ranging from 3 to (one source) 6365; thus there are either many rolls yet to be added, which seems unlikely, or the gaps in their numbering system had some logic yet to be clarified. A “limited logic” theory currently seems the most plausible approach. There are groups of numbers (often contiguous and most notably in the 2000s) which make some sense within themselves – e.g. cinema organ rolls, USA, “Echo” and “Vox Humana” models of the “Philharmonie”. See also endnote 34 in this connection.
 - 12 Interim listings are available at www.davidrumsey.ch/Philharmonie Rolls and a tentative chronology offered (.qpw and .xlsx formats).
 - 13 Gerhard Dangel (op.cit. p133) reports that the firm were already advertising artist-recorded rolls in 1904 at the Louisiana Purchase Exhibition (see above, endnote 2) for a “forerunner of the ‘Philharmonie’”. The listings referred to in endnote 12 show some low-numbered, obviously American-related recordings. These possibly preceded Freiburg’s artist recordings. If so, then Welte’s US branch could have made the earliest organist recordings. For example a group of seemingly American-related rolls – Stephen Foster songs – are found in the range between W131–167.
 - 14 The enigmatic “black-holes” in the Welte listings of this era, W483–490, 492–499 etc., have not so far been explained: no titles or artists have yet been linked to them.
 - 15 Aspects of the repertoire recorded by Welte is addressed in the articles by Brigitte Heck and Kai Köpp in this volume.
 - 16 There is a confusing scope of Welte’s tracker-bars and the instruments with which they were associated, e.g. see <http://www.mechanicalmusicpress.com/rbook/scales.htm> (accessed 7.9.2017) where Welte 75-hole, Orchestrion (Cottage and Concert Orchestrion Styles 1–8), 100-hole Philharmonic, 100-hole Piano Orchestrion (P.O.), 100-hole Brass Band Orchestrion, 120-hole Orchestrion (for Concert Orchestrion Styles 9 and 10) are listed. The “Philharmonie” at Tunbridge Wells (GB) offers a choice of two roll-playing mechanisms. Hagmann (see also endnote 16) gives specifications and tracker-bar layouts for specific instances of I–II (100), III–IV (120) and V–VI (150). The Welte firm were very flexible with their names and products – no doubt with a keen eye to their market – so much so, that it is sometimes hard to differentiate all names and models. More detailed general information on tracker-bars and their hole-numbers can be found in Appendix IV of “The Golden Age of Automatic Musical Instruments”.
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- 17 Indeed the layout of the 100, 120, 150 etc. tracks on these rolls needs to be consistent with the functions of the instrument on which they are to be played. Peter Hagmann in *Das Welte-Mignon-Klavier, die Welte-Philharmonie-Orgel und die Anfänge der Reproduktion von Musik*, Bern 1984, p115, notes some differences between the US and European 150-hole schemes, probably reflecting the variant construction of the US “Philharmonic” (3 manuals and pedals) and European “Philharmonie” (2 manuals and pedals). A full investigation is yet to be undertaken, but, “prima facie”, Welte seem to have made the 150-hole roll and tracker-bar systems reasonably compatible with each other for related models.
- 18 Kurt Binninger: “Die Welte-Philharmonie-Orgel”, in: *Acta Organologica* 19 (1987).
- 19 Binninger op.cit.. It seemingly became 27/II+P, possibly under Edwin Lemare’s 1913 influence. By this time it also included such features as the Vox Humana Echo enclosure. There is some doubt about Binninger’s memory recall in the minor detail. This can usually be easily rectified – e.g. he omits the Tremulant (standard, very frequently-used stop).
- 20 The rolls actually only operate the basic 27 or so stops of the 1913 Welte instrument but were made to “patch upwards” for some further additions of the 1920s, mostly under the influence of Swiss organist, Karl Matthaei. Other (Welte-added) stops in the 1937 form of the Seewen instrument are there for hand-playing, not roll-playing, although many of them were later added to the “organo-pleno” and similar “collective”, upwards-patching functions. The organ’s computer now allows an appropriate “Gestalt” to be selected, based e.g. on recording date.
- 21 It can be found in *26 Italian Songs and Arias*, John Glenn Paton, ed., Alfred Music Publishing ISBN 10: 088284489X / ISBN 13: 9780882844893. Here it is advertised as a “... new edition of the world’s most loved songs and arias ...”
- 22 A “Philharmonie” II copy is in existence, but the only date associated with it (Deutsches Musikautomaten-Museum, Bruchsal Catalogue op.cit.) is June 1st 1914. The responsible roll-technician identified is “Springman”. 1914 is three years after the roll was “finished” for Turin, and Springman is an identity who seems to have had responsibility for converting a number of rolls in this manner. His name has so far not turned up in connection with any original 150-hole Philharmonie rolls. W474 makes no appearance in a Welte 1911 Philharmonie I–II catalogue, but is offered in a later (undated but generally attributed to 1913) catalogue. A number of artist-recorded rolls were also included in this 1913 catalogue, but with relevant recording sessions known to have begun as late as 26th September 1913 (Wolstenholme) it appears that some of the content must either have been speculative, prophetic or the issue appeared very late in 1913, even early 1914.
- 23 However almost anything was possible with Welte: see e.g. Hagmann (op.cit., p195) for a model V specification without a 2’.
- 24 Using the Seewen “Philharmonie” V–VI.
- 25 This effect is again evident in the accompaniment roll to Ave Maria W1637 and possibly the intention in many of Paul Mania’s which could function as “repetiteur” rolls, although Welte never specifically identified them as such. If nothing else, these soft solos at least leave the essential melody present should there be no singer or instrumentalist.
- 26 There is further evidence to show that this adaptation of artist-recorded rolls was extended to the orchestrion market (the process of conversion “upwards” from 100- or 120-holes, or from piano rolls, is clearly documented in the Philharmonie master rolls held at Seewen). Conversion technology was available from no later than early 1911, took in at least 88- 100- 120- and 150-hole technology, and could work any way, up or down.
- 27 Also found in this report of the proceedings of the Seewen Symposium of March 2013.
- 28 Fair speculation here is that this comment may have been intended to convey the achievement of making their swell system work properly, not just the manipulations for this roll. Out of that comes another tentative observation: since there was no swell in the March 1911 version of W474, and only in March 1913 could Lemare express his full approval, then the perfection of Welte’s swell recording system could have taken two years or more. Dominik Hennig’s findings of changes to their swell technology in this period sit well with such a hypothesis.
- 29 A recording of this roll can be heard at <http://www.davidrumsey.ch/W474.mp3> (accessed 7.9.2017).
- 30 In: *Zeitschrift für Instrumentenbau*, 12. Jg., Nr. 35, 17. September 1911, p564. This information was kindly provided post-conference, March 19th 2013, by Brigitte Heck of the Deutsches Musikautomaten-Museum, Bruchsal, Germany.
- 31 The dates given by Bruchsal for rolls in their Exhibition Booklet (op.cit. endnote 9) are all after the known recording dates of any corresponding 150-hole rolls. We cannot yet be sure of the dates that specific orchestrion rolls were first created; only copies, no masters, are known to exist and these lack the information found on the “Philharmonie” masters. Welte did, however, make a new Philharmonie 150-hole master whenever an earlier orchestrion roll was used in this way. The reasons for this must have included the wider manual compasses, presence of a pedal division and increased tonal resources available on the “Philharmonie”. Around 1914 we also have direct evidence of some “Philharmonie” artist-recordings being reduced e.g. down to 100-note orchestrion rolls. Non-artist orchestrion rolls mostly preceded their 150-hole “Philharmonie” versions; artist-recorded rolls have so far only ever been found to precede their orchestrion or “Philharmonie” I–II versions.
- 32 Significantly, just two days later than the second date, 13th March 1912, we also find the alterations noted on W474 mentioned
-

earlier. It seems logical that any changes Welte wanted in these rolls as a result of their reception in Turin waited a short while after they returned – Christmas for one thing intervened – and then were done more or less together. The equipment needed to make such corrections is unlikely to have been taken to Turin; it had no place there and was needed in Freiburg. The “new ending” of W482 seems have been an extension to a recitative-like section and possibly some tweaking in the second half which stretches the orchestrion roll timing from 9’43’’ to the “Philharmonie’s” at 10’28’’. The basic tempi of the music seem to be exactly the same.

³³ It is difficult to say when such additional resources as those which are mentioned in the 1913 form of the “Philharmonie” were actually added to the 1909 form. All evidence so far found – including the masters – indicates that most were available in Turin.

³⁴ Binninger op.cit.

³⁵ The rolls immediately after W1000 give an order amounting at least to strong clues regarding their chronology. Few rolls bear an actual date of recording, few records of Freiburg recording sessions have survived and the catalogues, which can be cumulative, summaries, or merely addenda, are frequently undated. Many of the master rolls bear a red factory stamp “DURCHGESPIELT u. REGULIERT”, then a date and a signature; this refers to the first major edit and check they were put through. It can give a clue, and here the number sequences and other data can offer significant help. Although this date may be assumed to immediately follow the recording, there are many known instances where years, even possibly a decade or so seem to have elapsed. Such dates must therefore be viewed as the latest possible date of recording. This information was lost whenever a master in its second stage (recorded, perforated) was copied (often undertaken when the little “bridges” between the perforations fray or tear). See also the links to full listings in endnote 12.

³⁶ op.cit. (Endnote 10).

³⁷ As a “Philharmonie” I – II roll it first appears in the Welte 1913 catalogue.

³⁸ A recording of W482 played on the Seewen “Philharmonie” V – VI can be heard at <http://www.davidrumsey.ch/W482.mp3> (accessed 7.9.2017).

ABSTRACT

Welte's Philharmonie for Turin 1911 – the evidence of the rolls

The Welte operation was not just confined to one instrument or type of instrument. Welte-Mignons, Vorsetzers, orchestrions and “Philharmonies” provided a plethora of options. The firm naturally wanted to sell its whole range of instruments and, no doubt, a collection of recordings from its impressive catalogue of rolls to play on them in Turin. In all likelihood they took a number of instruments there, including different models of the same series. Evidently they also took a large assortment of very impressive rolls, including a selection of their best for the “Philharmonie”.

Some of these rolls had appropriate “Italian” content. The Welte numbering sequence helps to establish a chronology.³⁵ W474, student organist Franz Philipp's performance of the *Salvator Rosa Canzonetta*, was artist-recorded. W481 (Rossini, *William Tell Overture*) appears to have been converted from an earlier format in preparation for Turin. All require a 150-hole tracker bar system, and although W474 does not use all the resources of a Model V–VI, the others to all intents and purposes do. W481 had origins in an Orchestrion format. It was available as a “Philharmonie” II roll on 1st June 1914 – three years after Turin – as noted in the Bruchsal catalogue.³⁶ With W482 (*William Tell Trio*), also having orchestrion associations, we have both the clear evidence of a specific dating immediately prior to Turin, what appears to be hurried preparation, a 150-hole roll, and a very comprehensive registration scheme that can leave no doubt that a model V–VI was its true destiny³⁷.

Since a Model IV was being advertised in the month before Turin opened, it can be assumed that Welte at least intended this instrument to be present. Smaller models would not have been able to play rolls such as W481, 482, or those praised by the critics to full advantage. Apart from anything else, the *Vox Humana* and *Vox Humana Echo* are both required at various stages in these rolls – clear Model V–VI territory.³⁸

The suitability of the musical content in W481 and 482 – Italian opera – and the technical mastery of their virtuosic orchestral effects, use of 150-hole systems and requirements for the full registration resources of the largest model “Philharmonie” – all these, together with the glowing reports mentioned above, argue strongly in favour of a Model V–VI being at least one of the Welte instruments present in Turin during 1911.

ZUSAMMENFASSUNG

Weldes Philharmonie für Turin 1911 – das Zeugnis der Rollen

Welte beschränkte sich nicht einfach auf ein einzelnes Instrument oder einen Instrumententyp. Mit ihren Mignon-Klavieren, ihren Vorsetzern, Orchestrion und Philharmonie-Organen bot Welte eine Fülle von Modellen an. In Turin wollte die Firma sicherlich ihre ganze Palette an Instrumenten und eine grossen Auswahl an Musikrollen aus ihrem umfangreichen Katalog zeigen. Man kann davon ausgehen, dass sie eine Reihe von Instrumenten, darunter unterschiedliche Modelle aus denselben Serien, ausstellten. Sicherlich gehörte dazu auch eine grosse Anzahl ihrer äusserst beeindruckenden Rollen, unter ihnen auch die besten für die Philharmonie-Organ.

Einige dieser Rollen waren passend zum Ausstellungsort mit italienischen Werken bespielt. Das Welte-Nummerierungssystem erlaubt eine chronologische Einordnung.³⁵ W474, Canzonetta del Salvator Rosa, war von Franz Philipp selbst in einer eigenen Version eingespielt worden. W481 (Rossini, Ouvertüre zu Wilhelm Tell) andererseits scheint von einem älteren Format speziell für Turin konvertiert worden zu sein. Alle Rollen verlangen einen Skalenblock mit 150 Spuren, und wenn auch W474 nicht alle Möglichkeiten des Modells V–VI ausschöpft, so tun es die anderen Rollen durchaus. W481 war ursprünglich für das Orchestrion konzipiert worden. Wie im Bruchsal-Katalog vermerkt ist, wurde das Werk am 1. Juni 1914 als Philharmonie-II-Rolle veröffentlicht – drei Jahre nach Turin.³⁶ Da W482 (Trio aus Wilhelm Tell) ebenfalls Hinweise auf eine ursprüngliche Verwendung für das Orchestrion aufweist, verdichten sich die Hinweise auf eine Datierung unmittelbar vor Turin: eine allem Anschein nach hastige Vorbereitung, eine 150-Spur-Rolle und eine sehr umfassende Registrierung, die keinen Zweifel daran lässt, dass sie für das Modell V–VI gedacht war.³⁷

Da das Modell bereits einen Monat vor dem Beginn der Turiner Ausstellung beworben wurde, kann man davon ausgehen, dass man bei Welte zumindest beabsichtigte, dieses Instrument auszustellen. Kleinere Modelle wären nicht in der Lage gewesen, W481, 482 oder die anderen von den Kritikern gepriesenen Rollen unter Ausschöpfung all ihrer Möglichkeiten abzuspielen. Allein die Vox Humana und Vox Humana Echo sind an mehreren Stellen in diesen Rollen vorgesehen – ein klarer Fall für das Modell V–VI.³⁸

Die Wahl von W481 und 482 mit italienischer Oper, die technische Brillanz ihrer virtuos orchestralen Effekte, die Verwendung des 150-Spur-Systems und die Nutzung des Potenzials der vollen Registratur des grössten Philharmonie-Modells – all dies weist zusammen mit den oben erwähnten enthusiastischen Kritiken zwingend darauf hin, dass Welte 1911 mit mindestens einem Modell V–VI unter ihren Instrumenten in Turin vertreten gewesen sein musste.

RÉSUMÉ

Le Welte-Philharmonie pour l'exposition de Turin de 1911 – le témoignage des rouleaux de musique

L'intervention de Welte ne s'est pas juste limitée à un instrument ou un type d'instrument. Welte, avec ses pianos Welte-Mignon, systèmes de reproduction adaptés au clavier, les "Vorsetzer", orchestrons et orgues Welte-Philharmonie, a offert une pléthore d'options. À Turin, l'entreprise souhaitait naturellement présenter l'ensemble de sa gamme d'instruments, et un vaste choix de rouleaux de musique référencés dans son impressionnant catalogue. Il est probable qu'elle avait sélectionné une collection d'instruments, dont différents modèles d'une même série. Il est tout aussi vraisemblable qu'elle y ajouta de nombreux rouleaux, parmi les plus éloquents, sans doute leurs meilleurs pour l'orgue Philharmonie.

Sur plusieurs de ces rouleaux étaient enregistrées des œuvres italiennes, par égard pour le lieu. Le système de numérotation Welte permet d'établir une chronologie.³⁵ Le W474, *Canzonetta del Salvatore Rosa* avait été enregistrée par Franz Philipp lui-même. Le W481 (Rossini, *Ouverture de Guillaume Tell*) semble avoir été converti spécialement pour Turin à partir d'un format plus ancien. Tous les rouleaux exigent un appareil de transmission des informations lues sur le papier (Skalenblock) avec 150 pistes, et si tant est que le W474 n'épuise pas toutes ressources du modèle V–VI, les autres rouleaux le font bel et bien. Le W481 était initialement conçu pour l'orchestron. Comme le mentionne le catalogue du musée de Bruchsal, l'œuvre fut publiée le 1^{er} juin 1914 sous forme de rouleau Philharmonie-II, soit trois ans après l'exposition de Turin.³⁶ Le W482 (*Trio de Guillaume Tell*) présentant lui aussi des indices de sa destination première pour l'orchestron, une datation immédiatement antérieure à Turin se précise: apparemment une préparation précipitée, un rouleau à 150 pistes et une registration très complète, qui ne laisse aucun doute sur sa conception première pour le modèle V–VI.³⁷

De la publicité ayant été faite pour le modèle un mois déjà avant l'ouverture de l'exposition de Turin, on peut supposer que Welte avait pour le moins l'intention de présenter cet instrument. Des modèles plus petits n'auraient pas été en mesure de jouer à leur plein avantage des rouleaux comme le W481, 482, ou ceux encensés par la critique. Les jeux de voix humaine et de voix humaine d'écho, prévus sur ces rouleaux en plusieurs endroits, sont à eux seuls typiques du modèle V–VI.³⁸

Le choix du W481 et du 482, de l'opéra italien, la brillance technique de leurs effets orchestraux virtuoses, l'adoption du système à 150 pistes et l'exploitation du potentiel du registre complet du plus grand modèle de l'orgue Philharmonie ainsi que les critiques dithyrambiques mentionnées plus haut sont autant d'éléments qui plaident clairement pour la présence d'au moins un modèle V–VI parmi les instruments exposés par Welte à Turin en 1911.

CHRISTOPH E. HÄNGGI UND KAI KÖPP (HRSG.)

'RECORDING THE SOUL OF MUSIC'

WELTE-KÜNSTLERROLLEN FÜR
ORGEL UND KLAVIER ALS AUTHENTISCHE
INTERPRETATIONSDOKUMENTE?

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IMPRESSUM



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Sammlung Dr. h.c.
Heinrich Weiss-Stauffacher

Herausgeber
Hochschule der Künste Bern
Forschungsschwerpunkt Interpretation
Fellerstr. 11
CH-3027 Bern
Tel. +41 31 848 49 11
www.hkb.bfh.ch/interpretation

Museum für Musikautomaten
Sammlung Dr. h.c. H. Weiss-Stauffacher
Bollhübel 1
CH-4206 Seewen
Tel. +41 58 466 78 80
www.musikautomaten.ch

Verantwortliche Herausgeber: Christoph E. Hänggi und Kai Köpp
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